Note: Our teams are working on a more robust section on Eating Disorders on our website. This PDF is meant to be a temporary resource, please check back often for the updated Eating Disorder Toolkit on childrenswi.org.

PEDIATRIC EATING DISORDER TOOLKIT – REGISTERED DIETITIANS

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Medicine is a dynamic science; as research and clinical experience enhance and inform the practice of medicine, changes in treatment protocols and drug therapies are required. The authors have checked with sources believed to be reliable in their effort to provide information that is complete and generally in accord with standards accepted at the time of publication. However, because of the possibility of human error and changes in medical science, neither the authors nor Children's Hospital and Health System, Inc. nor any other party involved in the preparation of this work warrant that the information contained in this work is in every respect accurate or complete, and they are not responsible for any errors in, omissions from, or results obtained from the use of this information. Readers are encouraged to confirm the information contained in this work with other sources.

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This pediatric eating disorder toolkit, is intended as a resource for Registered Dietitians, Mental Health Providers, and Medical Providers that are seeing patients with eating disorders due to a lack or limited availability of specialized treatment providers available to patients/families. This is not a comprehensive treatment guide. The goal of this pediatric eating disorder toolkit is to promote key areas of assessment and follow up care until more specialized care is established. Please note that if specialized eating disorder care providers exist in or near your community, it is recommended to connect patients and families to these resources as quickly as possible.

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General Information

MULTIDISCIPLINARY TREATMENT TEAM

Treating eating disorders happens best under the guidance of a multidisciplinary treatment team:

- Primary medical provider
- Mental health therapist (LPC, LCSW, Psychologist), preferably trained in eating disorders
- Registered dietitian (RD), preferably trained in eating disorders
- Family therapist (if recommended)
- Psychiatrist (if recommended)

It is imperative that each member of the treatment team be willing and able to collaborate care with the other disciplines in a timely manner to ensure the best and most consistent care across all disciplines.

Unfortunately, sometimes it is not possible for all treatment team members to be part of the care team. This can be for a variety of reasons such as:

- Lack of providers in a specific geographic area.
  - If there is a lack of providers in your geographic area, please investigate virtual resources or referrals for your patients. There are many excellent virtual resources that could be assembled to form a full treatment team. Another great option is getting case consultation from a certified eating disorder specialist in that particular discipline. To connect with a Certified Eating Disorder Specialist visit the International Association of Eating Disorder Professionals website at iaedp.com and click on the link "Find An Eating Disorder Professional".
- Lack of insurance coverage for a particular specialty area.
  - It is advised that patients/families check with their health insurance company on coverage for each of these specialty areas for the treatment of an eating disorder.
- Patient/family may not want a particular discipline added to their loved ones' treatment team.
  - This can be for a variety of reasons. We encourage this be reviewed on a case-by-case basis. In most instances a full treatment team offers the best outcomes.

DIAGNOSTIC CRITERIA

Diagnosis of an eating disorder can be made by a medical provider, therapist, psychologist, or psychiatrist. These diagnostic criteria are provided for educational purposes. Please refer patient to an evaluation with a specialist if there are concerns for restricted or avoidant eating. For a complete listing (along with criteria) for feeding and eating disorders, please refer to DSM-5 (Diagnostic and Statistical Manual of Mental Disorders).

Avoidant Restrictive Food Intake Disorder (ARFID)

Avoidant/restrictive food intake disorder (ARFID) includes restrictive eating due to one or more of the following:

- Low appetite and lack of interest in eating or food.
- Extreme food avoidance based on sensory characteristics of foods e.g. texture, appearance, color, smell.
- Anxiety or concern about consequences of eating, such as fear of choking, nausea, vomiting, constipation, an allergic reaction, etc.

The diagnosis of ARFID requires that difficulties with eating are associated with one or more of the following:

- Significant weight loss (or failure to achieve expected weight gain in children).
- Significant nutritional deficiency.
- The need to rely on a feeding tube or oral nutritional supplements to maintain sufficient nutrition intake.
- Interference with social functioning (such as inability to eat with others).

Note: Consider SLP and/or OT referral when there are swallowing and/or sensory concerns.

Anorexia Nervosa

Anorexia nervosa includes the following symptoms:

- Caloric restriction leading to underweight OR weight that is less than what is expected for age.
- Intense fear of gaining weight OR persistent behavior that interferes with weight gain.
- Body image disturbance OR undue influence of body weight or shape on self-evaluation, OR lack of recognition of seriousness of low body weight.

Atypical Anorexia Nervosa

Atypical anorexia has the same criteria as anorexia nervosa with the exception of a BMI that is normal to above normal ranges despite significant weight loss.

Bulimia Nervosa

- Recurrent episodes of binging and purging at least once per week (purging may include self-induced vomiting, fasting, excessive exercise, laxative or diuretic misuse).

Binge Eating Disorder

- Discrete episodes of binge eating that occur at least once per week for 3 months.
- Episodes must include eating more than another person would in similar circumstances, and sense of loss of control.
- Episode have at least one of the following features: eating in secrecy, eating rapidly, eating until uncomfortably full, eating when not hungry, or guilt/shame afterward.

SYMPTOMS

Source of information: National Eating Disorders: https://www.nationaleatingdisorders.org/warning-signs-and-symptoms. Please note: this is *not* a checklist but instead a list of symptoms that could be present with some eating disorders.

- Preoccupation with dieting/fad dieting, weight or weight loss, body shape and size
- Frequent mirror checking for perceived appearance flaws
- Preoccupation with food or food avoidance, calories, carbohydrates, sugar, fat
- Overly strict food rules
- Refusal to eat certain foods or up to whole food groups, or foods previously enjoyed
- Cutting out an increasing number of foods or food groups
- Increased concern and time spent thinking about "health" of ingredients, what is deemed "health, clean, or pure", high distress when healthy foods aren't available, follow and fixated on health/clean eating
    - For more information, search **ORTHOREXIA** on the National Eating Disorders website
- Withdrawal from friends/family, no longer participating in things use to enjoy doing
- Eating/behavior rituals with eating (certain utensils, certain order of eating, slow/fast eating pace, preference to eat alone)
- Excessive or rigid exercise regime (despite weather, sickness, injury, fatigue), need to 'burn' or get rid of calories, intense feelings if unable to exercise, exercise used to manage emotions, discomfort with rest or inactivity, exercise for permission to eat, exercising in secret, intense feelings involving physical activity
- Feelings of disgust, shame, guilt overeating, low self-esteem
- Eating of non-food items
- Small portions or skipping meals
- Gastrointestinal concerns (constipation, diarrhea, vomiting, acid reflux, bloating, stomach cramping, getting full quickly)
- Menstrual irregularities (light, inconsistent, irregular, amenorrhea, missing periods without the use of hormone contraceptives)
- Growth chart percentile changes, weight fluctuations
- Mood swings, difficulty concentrating, feelings of disgust, shame, guilt over eating, low self-esteem, withdrawal from friends and or family, depression and/or anxiety
- Low appetite, limited preferred foods, and lack of interest in eating or food. Extreme food avoidance based on sensory characteristics of foods e.g. texture, appearance, color, smell. Anxiety or concern about consequences of eating, such as fear of choking, nausea, vomiting, constipation, an allergic reaction, etc.

MEDICAL FINDINGS

Please note: this is *not* a checklist but instead a list of medical findings that could be present with some eating disorders.

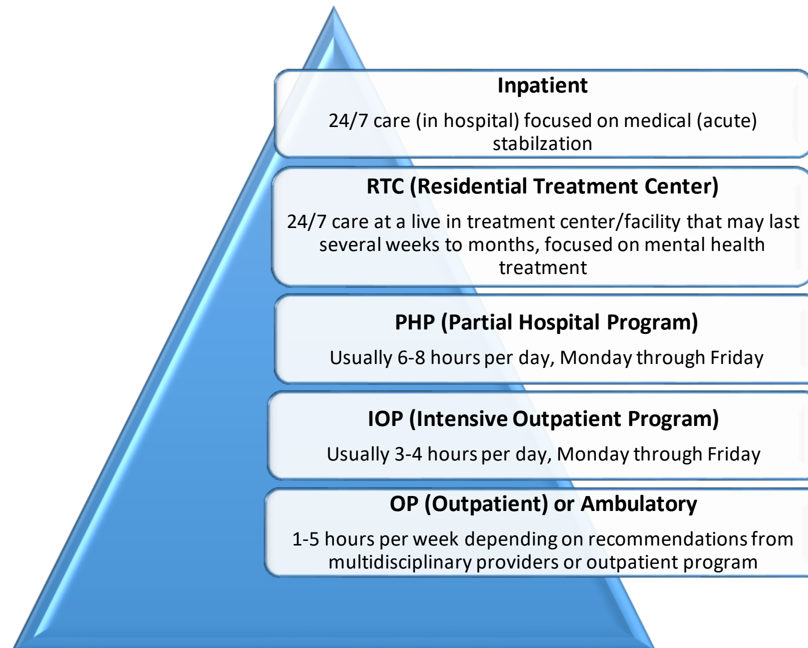
- Orthostatic intolerance symptoms, lightheadedness, dizzy upon standing, fainting
- ECG, bradycardia, irregular heart patterns
- Muscle weakness
- Cold intolerance (feeling cold all the time, extremities cold and mottled, dressing in layers-can also be to hide weight loss or self-harm)
- Difficulties with sleep or increase in sleep pattern
- Slow/poor wound healing, dry skin, hair that is dry and/or falling out, yellow/orange skin, new growth of fine body hair (lanugo), brittle nails, cuts/calluses across tops of finger joints (from self-induced vomiting)

- GI: delayed gastric emptying, slow intestinal transit time, nausea, bloating, postprandial fullness, GERD, constipation, esophageal mucosal damage, Mallory-Weiss tears, superior mesenteric artery (SMA) syndrome, hepatic transaminase concentrations and coagulation times can be elevated
- Weight loss with or without the fear of weight gain or body image concerns
- Dental problems (erosion of enamel, cavities, tooth sensitivity, swelling around salivary glands, discoloration of teeth)
- Swelling (edema)
- Frequent sickness (impaired immune system)
- Re-chewing, re-swallowing or spitting out food
- In the presence of diabetes: neglect and/or secrecy of diabetes cares, not taking medication as prescribed, infrequently filled prescriptions, missing diabetes related appointments, fear of insulin causing weight gain, restricting certain foods, A1c of 9.0 or higher on continuous basis, fear of low or high blood sugars, inconsistent meter readings, restriction of certain foods or food groups to lower insulin usage, deteriorating or blurry vision, fatigue/lethargy, frequent bladder and/or yeast infections, persistent thirst and frequent urination, nausea and/or vomiting, unexplained weight loss, low sodium and/or potassium, DKA or near DKA episodes, in addition to any of the other symptoms described above
- Renal and electrolyte effects: dehydration, electrolyte abnormalities, edema.
- Endocrine: euthyroid sick syndrome, hypercortisolemia, amenorrhea, low testosterone, smaller testicular volumes, growth delays/cessation, low bone density
- Abnormal laboratory and electrolyte possible findings:
    - CBC, CMP, Amylase, TSH, urinalysis, electrolytes.
    - **Labs associated with concern for refeeding syndrome:**
        - Low Potassium - Hypokalemia (< 3.0 mEq/L)
        - Low Phosphorus – Hypophosphatemia (< 2.5 mg/dL)
        - Low Magnesium – Hypomagnesaemia (less than 1.46 mg/dL)
    - **Labs Associated with Concern for Purging**

Method of Purging	**Serum Levels**					**Urine Levels**		
	Sodium	***Potassium***	***Chloride***	***Bicarbonate***	***pH***	***Sodium***	***Potassium***	***Chloride***
Vomiting	Increased, decreased or normal	Decreased	Decreased	Increased	Increased	Decreased	Decreased	Decreased
Laxatives	Increased or normal	Decreased	Increased or Decreased	Decreased or Increased	Decreased or Increased	Decreased	Decreased	Normal or decreased
Diuretics	Decreased or Normal	Decreased	Decreased	Increased	Increased	Increased	Increased	Increased

Mehler PS. Clinical practice. Bulimia nervosa. N Engl J Med. 2003 Aug 28;349(9):875-81. doi: 10.1056/NEJMcp022813. PMID: 12944574.

LEVELS OF CARE (LOC)



Treatment options in or near Wisconsin (updated: 1/30/24)	Locations	Ages	Pay Acceptance
OUTPATIENT			
Connected for Kids – Bellin Adolescent Medicine https://www.bellin.org/services_programs/child-adolescent-health/adolescent-care	De Pere (2024)-Green Bay (2025)	Ages 10+ (through college)	Accepts most insurances including Medicaid
Equip https://equip.health	Virtual FBT program	Ages 6+, including adults	Commercial insurance or self-pay only
Thedacare – physician referral needed from any clinic/hsp for eating disorder dietitian services	Appleton	Children, adolescents, adults	Commercial insurance, RD services not covered for patients with Medicaid (financial assistance may be available)
Local (individual) providers to form treatment team: PCP, Therapist, Registered Dietitian	In person and virtual	Varies	Varies
IOP (INTENSIVE OUTPATIENT PROGRAM)			
Monte Nido Chicago Eating Disorder Day Treatment: Monte Nido Chicago Day Treatment web page	Lombard, IL	Ages 11+	Newer program so still working on insurance contracting. But likely will be in network with BCBS and Aetna first
Rogers Behavioral Health - Child/Adolescent https://rogersbh.org/what-we-treat/eating-disorders-treatment)	Oconomowoc, WI	(internal step-down only), Ages 6+	Call: 800-767-4411
Rogers Behavioral Health - Adult	Oconomowoc, WI	Ages 18+	Call: 800-767-4411

Eating Recovery Center (ERC) – 3 days per week for 3 hours a day. Patients also will see their outpatient providers while in IOP so that they have individual support while being in IOP group support. https://www.eatingrecoverycenter.com/	Northbrook, IL	Ages 10+	Commercial insurance, not WI state insurance.
PHP (PARTIAL HOSPITAL PROGRAM)			
Monte Nido Chicago Eating Disorder Day Treatment: Monte Nido Chicago Day Treatment web page	Lombard, IL	Ages 11+	Newer program so still working on insurance contracting. But likely will be in network with BCBS and Aetna first
Rogers Behavioral Health – Child/Adolescent	Oconomowoc, WI	Ages 6+	Call: 800-767-4411
Rogers Behavioral Health – Adult	Oconomowoc, Appleton, Madison, WI	Ages 18+	Call: 800-767-4411
Eating Recovery Center (ERC) – 7 days per week. Offer housing at some locations but also have contract with hotels and Ronald McDonald.	Northbrook, IL	Ages 10+	Commercial insurance, not WI state insurance.
RESIDENTIAL			
Rogers Behavioral Health - Adolescent	Oconomowoc	Ages 12-17	Call: 800-767-4411
Rogers Behavioral Health - Adult	Oconomowoc	Ages 18+	Call: 800-767-4411
Eating Recovery Center (ERC)	Northbrook, IL	Ages 10+	Commercial insurance, not WI MA
Clementine Clementine Naperville Virtual Tour https://clementineprograms.com/program-locations/clementine-naperville/	Naperville, IL	Ages 11-17, female identifying adolescents	BCBS, AETNA in network (can do look into SCA's and out of network)
INPATIENT			
Children's Wisconsin – Adolescent Medicine (acute medical stabilization)	Milwaukee, WI	Ages 9+	Accepts most insurances including Medicaid
Eating Recovery Center (ERC) – ACUTE (acute medical stabilization)	Denver, CO	Ages 15+	Commercial insurance, not WI MA
Rogers Behavioral Health	Oconomowoc	Ages 8+	Call: 800-767-4411

WEIGHTS

Patient's weight

Patients with eating disorders are often highly fixated on their weight and body image. Desired weight loss is a common driver behind patients' decision to restrict food intake. As a result, it may be in a patient's best interest to:

- Refrain from discussing weight loss or gain.
- Encourage removal of scales at home (or at least removal of patient access to scales at home).
- At medical visits obtain "closed" weights (weight number is kept "closed" or unknown to patient)
- Omit weights on any documents provided to patients during visits.
- Focus on other health markers when making nutrition changes. For example, increased energy, improved mood, stronger hair or nails, decreased muscle fatigue during sports, etc.
- Please note:
    - Exposure and Response Prevention (ERP) is a treatment modality where use of scale/weight exposure may therapeutically be recommended.
    - Family-Based Treatment (FBT) traditionally uses open weights in therapeutically recommended ways.

"Closed" weight at medical office

IMPORTANT: keep the weight/number "closed" (unknown to patient).

1. Encourage the use of bathroom prior to weight check.
2. Take off shoes and any heavy clothing patient is wearing, this includes jackets, sweatshirts/sweaters, and any items in pockets (cellphones). It's okay to weigh patient wearing a light layer of clothing. If treatment team or caregiver(s) suspect that patient is hiding weighted items in pockets, bras, and underwear then collecting an examination gown weight would be encouraged (pending clinic protocols).
3. Keep your patient from touching nearby furniture or walls.
4. Place a light covering over the "number" screen (a post-it note typically works well), so that only clinician can see the number.
5. Have patient get on the scale backwards.
6. Do's:
    - Omit weights on any documents provided to patient during visit.
    - Refrain from discussing weight at all with patient (leave this up to treatment team to deem what is best for each individual patient).
    - Provide caregivers with weight information separately from the patient.

Children’s Wisconsin: *Closed weights within clinic*	
✓ Patient takes off everything except underpants ✓ Change into 2 gowns	✓ Weighed with back to scale ✓ Try to use the same scale for every visit

Telehealth

In preparation for a telehealth visit, an updated weight check should be completed ideally the day of, or up to 2 days prior to the telehealth visit. This updated weight could be obtained through a “weight check” at the primary care office or at home, if a caregiver has access to an accurate home scale (see instructions below). In either situation, it is recommended that the weight/number is "closed".

“Closed” weight at home

If family has an accurate home scale, a closed weight check can be completed at home by following these steps. IMPORTANT: keep the weight/number "closed" (unknown to patient).

1. Encourage the use of bathroom prior to weight check.
2. Take off shoes and any heavy clothing your child is wearing. This includes jackets, sweatshirts or sweaters. It's OK to weigh your child wearing a light layer of clothing.
3. Keep your child from touching nearby furniture or walls.
4. Use the scale on a solid ground (tile/vinyl/laminate/cement flooring; not carpeting).
5. Place a light covering over the “number” screen (a post-it note typically works well), so that only parent/guardian/caregiver can see the number.
6. Have your child get on the scale backwards.
7. Return the scale to a location where the child does not have access to the scale to weigh themselves.
8. Communicate updated weight privately with healthcare team. Caution should be exercised if the child has access to the electronic medical records for this data to be seen in a chart message.
9. Refrain from disclosing weight or weight trends at all with the child; encourage them to speak directly to treatment team with questions and/or concerns.

ORTHOSTATIC VITAL CHECKS

1. Heart rate (pulse) and blood pressure obtained **after 5 minutes** of supine rest
2. And repeated **after 2 minutes** of standing
3. Orthostatic changes:

   Blood pressure: sustained **DROP** of blood pressure
   - Systolic BP >20 mm Hg
   - Diastolic BP >10 mm Hg

   Heart rate (pulse): sustained **INCREASE** of pulse
   - >40 bpm in teens aged <19 YO

PHYSICAL ACTIVITY

The Medical Provider, Mental Health Provider, and RD will ideally work collaboratively to determine if the patient is safe to engage in physical activity (medically, mentally, and emotionally). It is important to understand the role physical activity plays in an individual’s life

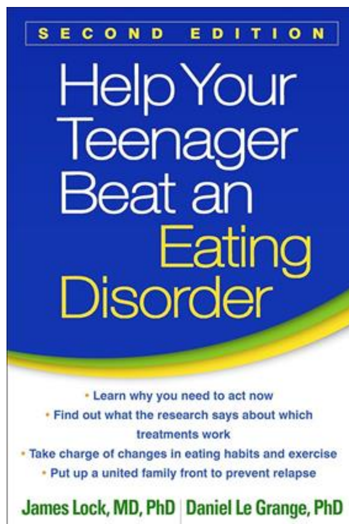
and eating disorder. Often, physical activity needs to be restricted initially and then gradually reincorporated with patient safety (medically, mentally and emotionally) at the forefront of any decisions made by the treatment team. If physical activity was used by the eating disorder, a therapist can be very helpful in this process of reintroduction.

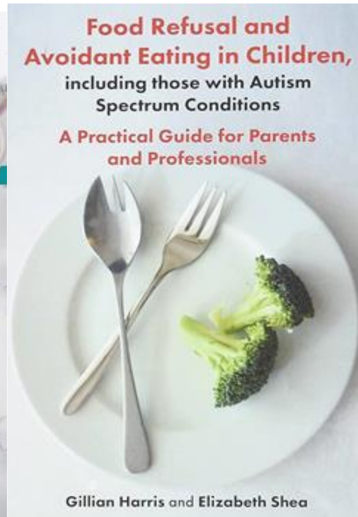
RESOURCES

Caregiver website resources

- http://www.parents-to-parents.org
- http://www.feast-ed.org/
- https://www.emilyprogram.com/for-families/resources-for-families/
- https://www.eatingrecoverycenter.com/resources/families
- https://www.nationaleatingdisorders.org/parent-toolkit

Book resources

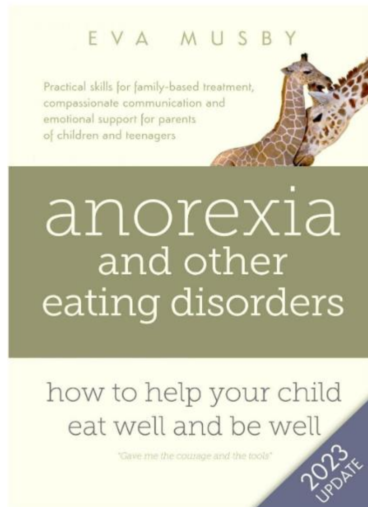


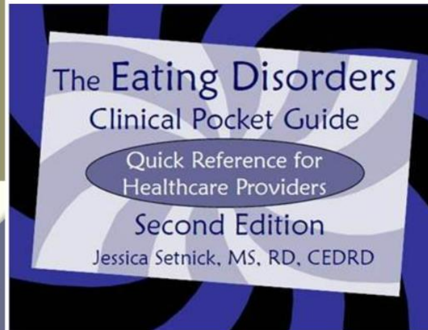


ACADEMY OF NUTRITION AND DIETETICS
Pocket Guide to

Eating Disorders
SECOND EDITION
Jessica Setnick, MS, RD, CEDRD

Academy of Nutrition and Dietetics





Resources for providers

- American Psychiatric Association (APA) Eating Disorder Practice Guidelines. Pocket book: https://eguideline.guidelinecentral.com/i/1492606-eating-disorders/0?
- Registered Dietitians additional online training:

Children's Wisconsin: (inpatient) hospital admission criteria for medical stabilization if one or more criteria present

Malnutrition

- Weight </=75% of ideal body weight (IBW) (calculation following)
- Patient eating <500 cal/day for last 3 days
- Rapid weight loss of >5% of body weight within 10 days before admission
- Acute food refusal

Cardiac Abnormalities

- Heart rate <45/min
- Cardiac arrhythmias, including prolonged QTc (If prolonged QTc exists, the patient will be admitted to the ICU for cardiac monitoring)
- Hypotension for age and sex or blood pressure <80/50mm hg
- Orthostatic changes in pulse (sustained increased >40 bpm in teens aged <19 years or sustained drop of blood pressure >20 mmHg systolic or >10 mmHg diastolic)

Electrolyte Abnormalities

- Hypokalemia (<3.0 mEq/L) (If IV K+ is required, the patient will be admitted to the ICU)
- Hypophosphatemia (<2.5 mg/dL)
- Hypochloremia (<88 mEq/L)
- Metabolic Acidosis/ Ketosis

Hypothermia (temp. <96 F)

Acute medical complications of malnutrition (e.g., syncope, seizures, cardiac failure, pancreatitis, etc.)

Acute psychiatric emergencies (e.g., suicidal ideation, acute psychosis) leading to medical instability

Co-morbid diagnosis (e.g., severe depression, obsessive-compulsive disorder, severe family dysfunction) leading to medical instability

Failure of Outpatient Treatment leading to medical instability as noted above

Arrested growth and development*

Uncontrolled binge eating or purging

*Consider the following question: Are you expecting this aged child to lose weight or fall off the height curve? Example: 9-12 year old children may not fit the admission criteria but still may need to be admitted.

Children's Wisconsin: hospital admission

✓ **If the patient has been seen in the last 24 hours AND**

✓ **Meets the criteria for admission *(prior section)***

Referral for hospitalization goes through the CW referral line (for direct admits seen within the last 24 hours) or through Children's ED (if not seen within the last 24 hours)

Admission work-up (labs and tests)

1. CBC
2. CMP
3. Mg
4. Phosphate
5. TSH
6. Amylase
7. ESR
8. Pre-albumin
9. UA
10. EKG
11. Patient without prior eating disorder diagnosis: consider differential for presenting symptoms

Children's Wisconsin: calculation for "%IBW"

1. Input patient information into CDC Growth Calculator for 2 to 20 years: https://peditools.org/growthpedi/ and click "submit"
2. Locate BMI at the 50%ile for age.

3. 50th%ile BMI x height (M^2) = **IBW(kg)**
4. Current weight (kg) / IBW (kg) x 100 = **%IBW**

Registered Dietitians

BEFORE SEEING PATIENT

Some basics

- Restriction of food, dieting, or weight loss is not recommended for treatment of *any* eating disorder.
- Any body shape or size can struggle with a severe eating disorder. The size of the person does not determine what eating disorder someone might be dealing with. Please do not assume what eating disorder (or behaviors) someone might be wrestling with based upon their body shape and size.
- Patients with eating disorders have often spent hours of their lives counting and tracking calories. Additionally, they often label foods as "good" versus "bad" or "healthy" versus "unhealthy." This way of thinking leads to the restriction of food groups and a reduction in the amount of food consumed in a day. The results are weight loss, nutrient deficiencies, and a negative relationship with food. If we use this language during our visits, we are feeding into the eating disorder and affirming its voice in their mind. Our goal is to take the morality out of food and assign a neutral value to all foods. We want to avoid using the words healthy, unhealthy, good, bad, and calories when describing foods. Other ways to describe foods would be to focus on the taste, texture, and smell of food, how the food makes them feel (for example, energized versus tired), its nutrient content, and the energy/fuel it provides our bodies.

Helpful vs harmful talking tips (for both providers and families)

Green light (helpful):
--Speak in terms of all food being neutral, not "good/healthy vs. bad/junk/unhealthy"
--Remind them that bodies come in all different shapes and sizes
--Find ways to encourage patients, without it being based on their body shape and size, weight gained/lost, or anything to do with their body
--Encourage rest days from physical activity throughout the week, especially if patient is sick, injured, exhausted, or is engaging in physical activity to change their body
--Encourage regular and consistent eating times throughout the day
--Speak of "nutritional restoration" instead of "weight gain"
---When referring to meal plan or nutrition prescription, try to use words such as: "nutrition", "fuel", "energy", and "food" instead of "calories"
--Speak with care and compassion: "I'm concerned you are not getting in your estimated needs", "I'm concerned about some lab work," "I'm concerned and care about you"

Red light (harmful):
-Do not encourage or give praise for: dieting, restrictive eating, fasting, weight loss, and physical activity routines that are rigid and strict
-Do not encourage self-weighing (scale use) or the use of the word "healthy weight". Health comes in many different weights and sizes
-Do not make comments about your own or anyone's body in derogatory or judgmental ways
-Do not categorize or label food as "good vs. bad" "healthy vs. unhealthy"
-Do not demonize food, such as: "carbs are bad, sweets are eaten when we lack willpower, high fat is bad, and sugar is horrible"
-Do not overvalue health/clean eating
-Do not use the words: "obesity" or "overweight", many individuals that live in larger bodies find these words offensive. Listen for how patients and families speak respectfully about their body shape and size and use their preferred language.

DURING ASSESSMENT

Helpful information to learn

- Referring provider or primary care provider—request signed release of information from patient/caregiver(s) for care coordination
- Therapist (or other mental health providers: psychologist, psychiatrist)— request signed release of information from patient/caregiver(s) for care coordination
- Medical diagnosis and any pertinent medical history
- Mental health, including but not limited to: self-harm, suicidal ideation, anxiety, depression, OCD, and any other general mental health or diagnoses
- Any diagnosis or suspect for neurodivergence, ADHD, autism, borderline, bipolar, OCD
- Trauma, abuse, bullying, adverse childhood experience(s)
- Sensory concerns
- Previous and/or current eating disorder diagnosis/treatment
- Orthopedic issues or injuries, over-use injuries, including fractures and stress fractures
- Surgeries
- Allergies (and testing done when and how), intolerances, avoidances, special dietary concerns
- Menstrual history, last menstrual period, regularity, amenorrhea, and hormone use
- GI:
  - Bowel movements (constipation, diarrhea, any medication use, frequency of bowel movements, presence of blood)
  - GERD
  - Early satiety (fullness after eating minimal amount)
  - Throwing up (frequency, method used, presence of blood)
- Weight/growth history: highest body weight, lowest body weight, current body weight, desired body weight, and ages at these weights
- Thoughts and feelings about their body image or appearance
- Growth charts
- Medications, supplements, drugs, tobacco, alcohol
- School placement/level of functioning
- Family members living at home, friends, level of support
- Access to food
- Motivation level of patient and caregiver(s)
- Give patient opportunity to share why they believe they are seeing RD and patient/family goals of treatment

Food Recall

- In eating disorder care, you will still ask for a detailed food recall
- Ask about the following:
  - timing of meals/snacks, servings, brands, and amount actually eaten
  - snacks, fluid, and caffeinated beverages too
  - vitamins, medications, supplements
  - if they know how many calories their intake usually is
    - we don't recommend calorie counting but it is important to know if it is happening
  - if food logs/diaries are being kept by patient/family
    - we do not want to encourage tracking apps; however, it is important for us to know if it is happening
- See also below behavior section for additional prompts to ask regarding food intake/restriction

Learning about your patient's behaviors

Behaviors are happening and it is our responsibility to ask in a gentle way about eating disorder behaviors, with no shame, judgment, or lecture to follow. It is also helpful to understand the frequency, duration, and last time engaged in.

Food	Meal Time	Physical Activity	Purging Behaviors	Other
• Restriction • Calorie counting • Measuring/weighing food • Reading food labels (sugar, calories, fat, sodium, carbohydrates, etc.) • Using items to reduce hunger (fluid, chewing gum, hard candy) • Overeat/binge eating • Fear of losing control around food and/or have lost control around food • Food aversions/restrictions, food fears, food rules • Fad diets, diet pills, shakes, supplements • Sensory acceptance/denial • Nighttime eating	• Reports of eating but no one observed eating episode • Chew/spit • Preference to eat alone or with others • Hiding food • Eating in secret • Eating pace (slow or rapid) • Measuring/weighing food • Using same dishes/utensils or eating pattern with meals • Excessive cutting/smashing food, counting bites • Other eating rituals	• Leisure and interests predominately involve physical activities with little to no interest in activities that are restful/sedentary • Doing above and beyond what coaches recommend • Engagement in physical activity to change body • Increased emotional response to being unable to engage in physical activity • Engaging in physical activity despite exhaustion, sickness, injury • Rigid and inflexible physical activity routine • Routine denial of social outings for rigid physical activity plan • Inquire about: history, consistency, frequency, duration, intensity, type of physical activity	• Self-induced vomiting • Laxatives • Diuretics • Compensatory physical activity/exercise • Bathroom use following meals • Presence of blood (urine/vomit/bowel movements)	• Self-weighing, body scale use, use of other body measurement devices • Body checking • Use of apps/websites/social media that influence how you feel about yourself, your body, food, nutrition (recommended removal of these) • Ask about beliefs and attitudes about: weight, appearance; desired changes; body image disturbance • Change in relationships; social engagement vs. isolation

Nutrition focused physical exam (NFPE) micronutrient possible findings:

- Hair: alopecia and/or brittle hair - falling out more frequently in shower or hair brush, flag sign *(alternate banding of dark and light colors in hair)*, lanugo *(fine, soft, un-pigmented hair development due to lack of fat present on body to keep the body insulated)*
- Eye: broken blood vessels in eyes, light sensitivity
- Mouth: cuts, fissures, swelling inside mouth (purging)
- Lips: cry, cracked lips
- Taste: taste aversions

- Teeth: tooth discoloration, decay, or sensitivity (may be a sign of purging due to emesis of undigested food and stomach acid)
- Nails: brittle or easily broken nails
- Skin: dry skin, petechiae (usually under eyes or on cheeks, may indicate purging), pitting edema in extremities, poor skin turgor, purple hands and/or feet, cold extremities, slowed capillary refill time, hypothermia, cold intolerance
- Hands: Russell's sign (dorsal lesions are caused by repeated contact of the incisors to the skin of the hand that occur during self-induced vomiting).
- GI signs: constipation, diarrhea – may indicate laxative or diet pill abuse
- Swollen parotid glands (purging)

NUTRITION RESTORATION AND GROWTH CHARTS

Nutrition restoration (weight gain)

The expected achievable rate of weight gain varies by treatment clinic; however, about a pound per week with weekly outpatient treatment is appropriate. In FBT, it is not uncommon to experience more rapid rates of nutritional restoration, sometimes >3 pounds per week.

Growth charts and "targets"

- Determining a "target" weight for kids and adolescents is difficult because they are in a state of growth and development; there isn't an "arrived" spot. Growth plots for healthy and growing children are expected to move upward with natural growth and development.
- It is imperative to examine patient's growth patterns and history before estimating where a patient may need to return to for health and healing from eating disorder. It is just as important to reassess this estimate throughout treatment.
    - **Please note:** disordered eating and body image distress typically starts *at least* 6 months prior to changes that can be reflected on a growth chart.
- Additionally, give careful consideration if you need to provide a "target" number or range since we know this number or target will be moving. Sometimes simply offering "returning patient back to their pre-eating disorder percentile range" is sufficient.
- For the health and safety of patient and family, please do not provide a weight suppressed "target" (a weight that is less than the child's pre-eating disorder growth curve). This has been found to be associated with worse health outcomes. Full and complete nutritional restoration (weight gain) is crucial for treatment of an eating disorder.
- Patient and caregiver(s) may benefit from being reminded patient is in a state of growth and development. Treatment "targets" and nutritional needs will change with time as patient continues to grow and develop.
- Resource videos can be found by searching online for:
    - "Growth charts Musby"
    - "Eating disorders growth charts and goal weight made simple"
    - "Poodle Science"

ASSESSING NUTRITION NEEDS

Nutrition prescriptions

Patients who develop eating disorders often have higher calorie needs than other adolescents. This is because when a patient goes a long period of time without sufficient nutrition resulting in weight loss, the body begins to compensate. The body's metabolism will begin to slow down to ration any available energy from food towards life sustaining functions like pumping the heart,

breathing, consciousness, rational thinking, movement, etc. However, organs like the brain and the heart can be significantly impacted, thus, resulting in slowed functioning. As the nutrition rehabilitation process starts, the metabolism may start to speed up to capture this new source of energy. This process may temporarily put the body in a hyper-metabolic state, so higher nutrition prescriptions to promote continued weight restoration is important. Based on growth trends, nutrition prescriptions can be adjusted as needed. **Noteworthy:** If the patient is not at risk for refeeding syndrome, then it is imperative to not underfeed the patient. For more information on risk factors for refeeding syndrome please search: Academy for Eating Disorders. Eating Disorder: A Guide to Medical Care.

Estimating nutrient needs

Children's Wisconsin: estimating nutrient needs
○ Energy: EER (using ideal body weight or actual body weight) x PAL (low active, active or very active) for nutritional restoration • Use actual body weight if patient's weight is >/=100% IBW ○ Protein: RDA or 15-20% of total caloric intake (0.95-2g/kg) ○ Fat: 25-30% of total caloric intake ○ Fluid: maintenance needs per Holliday-Segar Method

Other Example:

- Energy: REE x 1.8-2.0
- Increase calories if not gaining weight/weight stable at goal calorie level

MEAL PLANS

There are many ways to meal plan with a patient that has an eating disorder. This toolkit will discuss some options for meal planning and how to use them with your patient.

Rationale

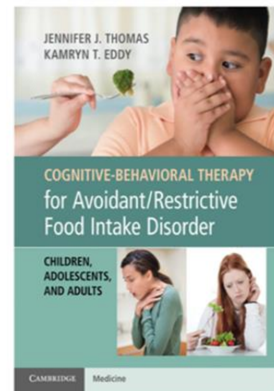
- Meal plans are prescribed for patients who require a structured nutrition routine to disengage from their eating disorder behaviors and meet their nutrient and energy needs.
- It is designed to reorient patient to a normalized eating pattern and restore their body's natural hunger and fullness cues.

- Meal plans are set at a targeted calorie amount to meet the patient's energy needs and, when needed, restore weight to their body's natural biological weight. Calorie amounts are intentionally not included in the meal plan and should not be discussed with the patient. Counting calories is a common eating disorder behavior that we are often working with patients on avoiding.
- Patients must follow and complete 100% of their meal plan.
- At follow up visits, assess the patient's adherence to the meal plan, thoughts and behaviors, weight trends, and make adjustments if nutritional restoration (weight gain) is not progressing as needed.
- The goal of a meal plan is not to create long-term reliance on a meal plan. Instead a meal plan can be an effective tool to help with nutritional (weight) restoration and returning growth trajectory.
- The length of this process varies from patient to patient, but typically patients with eating disorders can take months or years to fully disengage from eating disorder thoughts and behaviors.

Avoidant Restrictive Food Intake Disorder (ARFID)

Nutritional restoration, in the treatment of ARFID, continues to be a primary MNT goal; however, the nutrition interventions (such as meal plans) utilized by the RD can look very different pending the individual patient needs.

Recommended resource:



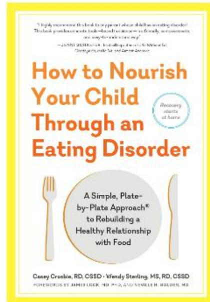
Setting up meal plan

- Once it is confirmed that patient is medically stable and is at the most appropriate level of care available to them, then provide education on:
  - The need for nutrition restoration (re-nourishment of the body)
  - The need for structured, consistent, and adequate nourishment throughout the day
  - The need for caregiver(s) (or trained support) presence and accountability at all meals and snacks (and postprandial if needed)
- Assess which meal plan option will best fit your patient's needs
- Provide meal plan education

Meal plan options

- Plate by Plate
- Entree/Side
- Exchange
- Calorie Prescribed

Plate by Plate Meal Plan



This meal plan is growing in popularity and is often the go to meal plan with Family Based Treatment. Caregiver(s) are not expected to know/understand exchanges, weigh/measure, nor count calories. Caregiver(s) (and trained support persons) would be responsible for all food purchases, cooking, portioning, plating, serving of the meal, and full supervision of meal. (Through FBT, treatment team would provide direction and timing on when food independence would be shifted back to loved one with an eating disorder). A great resource for providers and Caregiver(s) if using the Plate by Plate meal plan is "*How to Nourish Your Child Through an Eating Disorder*" by Crosbie C. and Sterling W.

General guidance the RD provides:

--Start with a 10" plate for all meals—try to have plate with no inner rim so that entire plate may be filled.

--Plate all food groups: 50% of plate with grains, 25% of plate with protein, 25% of plate with veggie or fruit, then add fats, and full serving of dairy.

--The entire plate should be filled, no empty space.

--Plan for 3 meals daily and 2-3 snacks daily (2-3 food groups per snack)

--Include variety of foods that fit together, caregiver(s) have the ultimate final say in what the loved one eats.

For free visual graphic visit: https://www.platebyplateapproach.com/product-page/how-to-follow-the-plate-by-plate-approach-50-starch

Example lunch:

Cheeseburger on bun with chips or fries (50% of plate grains + 25% of plate protein + added fat from cheese), whole apple (25% plate fruit), glass of milk (dairy)

Entree/Side Meal Plan

The entrée/side meal plan is an attempt to move towards more normalized language and thought about a meal and uses serving sizes (instead of exchanges).

Start with an entrée and then build sides that fit with that entrée to form a meal. An entrée is made up of three components: 2 grains, 1 protein, and 1 fat. To visualize an entree example, picture a sandwich or burger: 2 grains (bun), 1 protein (burger patty or deli meat), 1 fat (slice of cheese or spread such as butter or mayo).

Patients/Caregivers are provided education on serving sizes and food groups. RD uses the nutrition prescription to build a meal plan per the general caloric value of these food groups.

Some food items could be considered a protein, dairy, or a fat; the important piece to remember is that foods cannot be "double counted". For example: peanut butter could be considered a fat (1 Tbsp) or a protein (2 Tbsp), but if you wanted to count it as both a protein and a fat in a meal/snack you would need 3 Tbsp in that meal/snack.

Example lunch:

Entrée (2 grains + 1 protein + 1 fat): PBJ sandwich*. (*Peanut butter and jelly sandwich would be made with 2 Tbsp PB [protein] + 1 Tbsp of either more PB or butter [fat])

Side: chips (1 serving).

1 dairy: serving of yogurt.

1 fruit: whole apple.

Another example:

Entrée (2 grains + 1 protein + 1 fat): 1 cup casserole

Side: additional ½ cup casserole.

1 dairy: 8 oz dairy milk.

1 fruit: whole apple.

Exchange Meal Plan

This meal plan is based on the diabetic exchange lists. Food groups (grain, protein, dairy, etc.) are known as exchanges. Numbers next to the food group indicate how many exchanges of that food group patients are required to have at that meal/snack. Caregivers need extensive education on exchanges and serving sizes. Caregivers are responsible for portioning/plating all eating episodes. A RD uses a general caloric value of each food group to determine how many exchanges the patient would need to consume either per meal, or snack, or per day. (Exchange values along with portion sizes can be found by searching diabetic exchange lists.)

Note: Children's Wisconsin inpatient eating disorder unit uses exchanges in order to provide careful refeeding structure for their acute patient population.

Example lunch:

3 grains: bun (top and bottom bun) + chips (1 serving)

3 proteins: ~3 oz burger (1 oz = 7 g protein/exchange = total of 21 grams protein)

1 fat: (chips above count as 1 grain + 1 fat)

1 dairy: 8 oz dairy milk

1 fruit: whole apple

Calorie Prescribed Meal Plan

Calorie prescribed meal plans are not typically advised; however, if caregiver(s) are already counting calories, we can use that "skill" to ensure their loved one gets adequate nourishment. An important piece of this meal plan is to ensure that caregiver(s) are able and willing to do all cooking, plating, and serving of food; and that caregiver(s) understand that calories should not be discussed or disclosed with their child in any way. Caregiver(s) increase portion sizes or added energy in order to meet the caloric prescription. For families that are not engaged in calorie counting, it would NOT be recommended to initiate a calorie prescribed meal plan.

Example lunch:

Cook, serve, and plate child what family is eating.

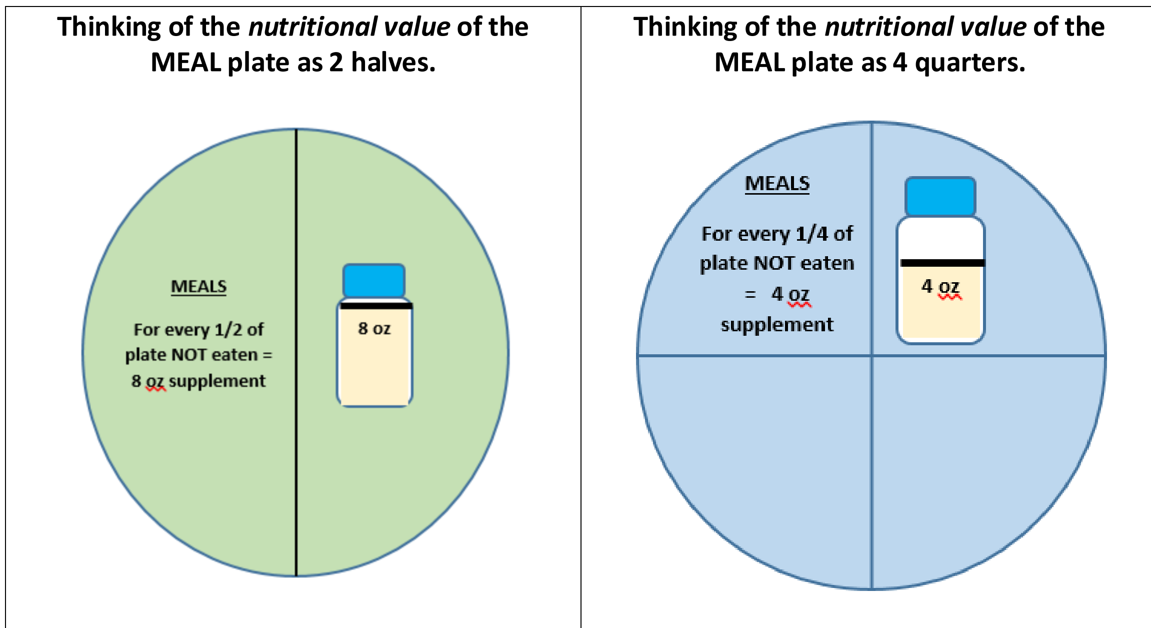
Ensure that child is served portion of meal (including beverages) to total: 2500 calories

Supplementation for food not eaten

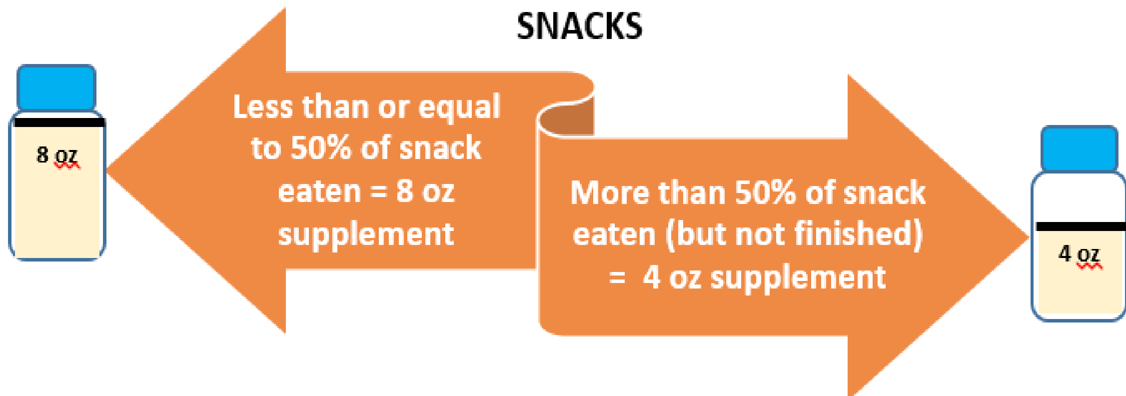
Food from the meal plan needs to be consumed. When food is not eaten, a recommended practice is to supplement using a formula (or high calorie nutritious beverage) for the energy that was not eaten. Commonly used supplements include:

- Ensure Plus
- BOOST Plus
- Pediasure 1.5

Supplement protocols varies depending upon institution/clinic/caregiver preference; however, two common protocols may include (but is not limited) to the following options.



Supplementing tip:
If the plate is broken down into smaller percentages (less than ¼ or ½), this can lead to confusion and/or negotiations over the percentage eaten (versus uneaten) therefore percentages less than ¼ are not suggested.



SUPPORT GUIDANCE

Basics

- Eating disorders are a life-threatening illness and require intense treatment and intervention.
- It is important to help families understand that they did not cause the illness nor did the child pick this illness.
- It is also important for families to fight FOR the child.
- Caregiver(s) are encouraged to take over all grocery shopping, menu planning, meal preparation, and plating of meals.
- Food purchased should not be diet/light/fat-free food/low sugar/low carb.
- When food is prepared the child should not be in the kitchen.
- Caregiver(s) (or trained support) are responsible for supervising all meals and snacks.
- All meals and snacks are eaten while seated at a kitchen/dining room table or counter top surface (reduces the options for disposing/hiding food).
- If a child has any form of purging behavior (self-induced vomiting, laxatives, exercise, etc.):
    - The bathroom should be used *prior* to eating and not again until 30 minutes following snack or 60 minutes following meal.
- If a child is taking an extended amount of time to finish a meal or snack, limit the time allowed to eat snacks to 15 minutes and meals to 30 minutes. Often, as time to finish a meal or snack gets longer the child's anxiety increases.
    - If food is not consumed within that time frame, then an oral nutrition supplement is provided. If supplement is refused this may indicate need for tighter consequences or more support such as higher level of care.

The 4C's of meal support for caregiver(s) (Source: Kelty eating disorders)

- **Remain Calm.** Children are typically stressed and sensitive to others' negative emotions during meals. Staying calm helps foster a more peaceful and predictable environment.
- **Be Confident**. The more confident you appear the more reassured the child will feel.
- **Be Consistent**. Stick with what you've decided and don't negotiate.
- **Be Compassionate.** Understand that they are doing something that is very difficult for them.
- Meal supervision and support search using: "meal support Kelty eating disorders"
- If meal support is needed at school-- check with what school resources are available, one staff person that is willing to sit with student and have general conversation (not about ED) or allow student to bring one friend and have an staff person oversee food consumption.

Family Based Treatment (FBT)—Nutrition

Historically, RDs were not part of FBT and still aren't in traditional FBT. However, many treatment teams and clinics are recognizing the value and expertise that a RD can offer being part of the FBT treatment team. Some such areas include: recommendations on nutrition prescription, contributing to restrictions/guidelines/recommendations with physical activity, growth chart interpretation, and establishing nutritional restoration targets/goals/benchmarks. As well as providing eating disorder education and caregiver coaching and support. FBT has three phases that the RD may be invited to help in:

- Phase 1 – Focus on nutritional and health restoration along with behavior reduction. All meals and snacks are plated/portioned/supervised by caregiver(s).

- Phase 2 – Continued focus on nutrition and health restoration (once some success has been achieved in this area), meals and snacks can slowly be returned to patient while teaching patient skills around food.
- Phase 3 – Patient has regained food autonomy, working on issues outside of the eating disorder.

NUTRITION FAQ

What are signs/behaviors an individual may display if purging? Individuals who struggle with purging may display the following behaviors:

- Frequent trips to the bathroom either during meals or right after eating. May also flush the toilet multiple times, running water from sink or the shower while in the bathroom to disguise vomiting, taking more than one shower a day to provide an opportunity to purge, using a lot of mouthwash or breath mints to hide the smell or a raspy or scratchy voice.
- May also develop spot damaged teeth and gums, swollen salivary glands in the cheeks and/or sores in mouth and throat.
- Laxative abuse
- Excessive exercise

Can you tell if someone has an eating disorder just by looking at them? No, you can't tell if someone has an eating disorder based off appearance alone. An individual's appearance may not match the anxiety they feel inside when presented with food. Individuals who struggle with eating disorders also often have a distorted body image or are preoccupied with their physical appearance to the point that it is crowding out other thoughts. And from an outsider point of view, the individual may look "perfectly fine" or "healthy."

When might an eating disorder patient be at risk for refeeding syndrome?

- If a patient is malnourished, starved, or underfed for 7-14 days
- If weight loss of ≥ 10% in the preceding 1-3 months (including patients that live in a larger body with significant weight loss).
- If weight/length or BMI/age z-score < – 3
- If NPO for longer than 5-7 days

What is the purpose of offering a variety of food to patients who struggle with eating disorders? Many patients with eating disorders will only eat a restricted range of foods. Sometimes this started as a way of eliminating just one type of food but then progressed to the point that it severely limits food intake. Consequences of a restricted range of food intake can include nutritional deficits, maintenance of weight too low for your body or getting stuck in a cycle of binging or purging. Each of these, in turn, could cause serious medical complications. Increasing the range of foods eaten is a primary goal for patients of any eating disorder diagnosis. A variety in diet can help improve food flexibility, improve nutrition intake and overall successful treatment in eating disorders.

How might an eating disorder affect the body physically? Over time, inadequate nutrition can affect the body in a multitude of ways

- Stunted puberty
- Affected menstrual periods. If an eating disorder develops before an individual with a uterus' first period, periods may not start. For individuals developing eating disorders later, periods may stop.
- Anemia (low count of red blood cells) causing tiredness, weakness and dizziness.

- Stunted growth that could be permanent (i.e., height, bone development)
- Always feeling cold because the body has lost the fat it needs to keep warm.
- Stomach pain, constipation, and bloating.
- Dental complications – if purging
- Cardiac complications – bradycardia

What is the difference between overeating on occasion and binge eating disorder? Overeating on occasion or on holidays, is normal. By contrast, binge eating is the frequent consumption of a large amount of food associated with a sense of loss of control over eating. Binging is usually secretive and accompanied by feelings of embarrassment, shame, depression and guilt over the behavior. It often includes eating when not hungry, eating rapidly, and until uncomfortably full.

Nutrition intervention for patient in a restrict/binge cycle? Meal plan with structured eating opportunities throughout the day. Include binge foods into scheduled meals and snacks.

Should we acknowledge their weight trend since last visit or avoid discussing "the number"?
Will this information benefit the patient or the eating disorder? Typically, this information is being sought out by the eating disorder and as someone progresses in recovery, we will hear less of this voice wanting to know numbers.

Do review of symptoms and/or lab indicators provide any motivation for patients? Depends on the patient. For many patients, the drive for thinness can outweigh the concerns about their medical wellbeing. For athletes, sometimes having to stop their sport or training can provide some motivation for nutritional restoration.

How to manage expectations for patients that are athletes, like a dancer or wrestler? Have to fuel to perform. Gas for car to go. It's key to have caregiver(s) and coaches on board to follow through on boundaries.

How do you gently reflect that the presenting problem (example: GI issue-loss of appetite, weight loss) may be related to eating disorder?
Affirm the symptoms and your patient's experience. Then ask permission to share what you are thinking. Once permission is given then gently provide patient and family with symptoms that could be tied to the body getting insufficient fuel (such as: decreased/loss of appetite, early satiety, SMA, GERD, diarrhea/constipation, heart racing, lightheaded/dizzy).

What can the RD do in a short (10-15 minute) clinic visit, if there is suspect of an eating disorder?
Focus on the necessities of that clinic visit, find out what other providers they are seeing (specialty medical providers, therapists), reflect care and concern regarding what you are hearing and thank them for sharing. Follow up with patient's medical/therapy providers regarding your concerns so appropriate follow up can be established.

Can laxatives be used for treatment of constipation? Osmotic (e.g., polyethylene glycol or Miralax) or bulk-forming laxatives are preferred over stimulant laxatives (e.g., Senna) due to risk of abuse and to the potential hazard of "cathartic colon syndrome."